## **Section 1. Registration Information**

#### Source Identification

Facility Name:

CJ Bio America

Parent Company #1 Name: Parent Company #2 Name:

### Submission and Acceptance

Submission Type:

First-time submission

Subsequent RMP Submission Reason:

Description:

Receipt Date:13-Sep-2013Postmark Date:13-Sep-2013Next Due Date:13-Sep-2018Completeness Check Date:13-Sep-2013

Complete RMP:

Yes

De-Registration / Closed Reason:

De-Registration / Closed Reason Other Text:

De-Registered / Closed Date:

De-Registered / Closed Effective Date:

Certification Received:

## **Facility Identification**

EPA Facility Identifier:

1000 0022 2289

Other EPA Systems Facility ID:

### **Dun and Bradstreet Numbers (DUNS)**

Facility DUNS:

78435734

Parent Company #1 DUNS: Parent Company #2 DUNS:

## **Facility Location Address**

Street 1:

1946 Harvest Avenue

Street 2:

City: Fort Dodge
State: IOWA
ZIP: 50501

ZIP4:

County: WEBSTER

#### Facility Latitude and Longitude

Latitude (decimal): 42.512471 Longitude (decimal): -94.311070

Lat/Long Method: Interpolation - Digital map source (TIGER)

Lat/Long Description: Center of Facility

Horizontal Accuracy Measure:

Horizontal Reference Datum Name: North

Source Map Scale Number:

North American Datum of 1983

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

Owner or Operator

Operator Name: CJ Bio America
Operator Phone: (515) 302-8028

Mailing Address

Operator Street 1: 1946 Harvest Avenue

Operator Street 2:

Operator City:Fort DodgeOperator State:IOWAOperator ZIP:50501

Operator ZIP4:

Operator Foreign State or Province:

Operator Foreign ZIP:
Operator Foreign Country:

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person: Kelly Jessen

RMP Title of Person or Position: Sr. Environmental Coordinator

RMP E-mail Address: kjessen@cj.net

**Emergency Contact** 

Emergency Contact Name: Kelly Jessen

Emergency Contact Title: Sr. Environmetnal Coordinator

Emergency Contact Phone: (515) 571-9878 Emergency Contact 24-Hour Phone: (515) 302-8028

**Emergency Contact Ext. or PIN:** 

Emergency Contact E-mail Address: kjessen@cj.net

Other Points of Contact

Facility or Parent Company E-mail Address:

Facility Public Contact Phone:

Facility or Parent Company WWW Homepage

Address:

Local Emergency Planning Committee

LEPC:

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site: 160

FTE Claimed as CBI:

Covered By

OSHA PSM: Yes EPCRA 302: Yes

CAA Title V:

Air Operating Permit ID:

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

## **OSHA** Ranking

OSHA Star or Merit Ranking:

### Last Safety Inspection

Last Safety Inspection (By an External Agency)

Date:

Last Safety Inspection Performed By an External

Agency:

Never had one

## **Predictive Filing**

Did this RMP involve predictive filing?:

Yes

### **Preparer Information**

Preparer Name: Shawn Zablocki
Preparer Phone: (402) 350-7101
Preparer Street 1: 2111 S 67th Street

Preparer Street 2:

Preparer City: Omaha
Preparer State: NEBRASKA
Preparer ZIP: 68106

Preparer ZIP4:

Preparer Foreign State: Preparer Foreign Country: Preparer Foreign ZIP:

#### Confidential Business Information (CBI)

**CBI Claimed:** 

Substantiation Provided: Unsanitized RMP Provided:

#### Reportable Accidents

Reportable Accidents: See Section 6. Accident History below to determine

if there were any accidents reported for this RMP.

#### **Process Chemicals**

Process ID: 1000043306

Description: Lysine Production
Process Chemical ID: 1000052051

Program Level: Program Level 3 process
Chemical Name: Ammonia (anhydrous)

CAS Number: 7664-41-7

Quantity (lbs): 175100

CBI Claimed:

Flammable/Toxic: Toxic

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

## **Process NAICS**

Process ID: 1000043306
Process NAICS ID: 1000043690

Program Level: Program Level 3 process

NAICS Code: 311119

NAICS Description: Other Animal Food Manufacturing

## **Section 2. Toxics: Worst Case**

Toxic Worst ID: 1000035676

Percent Weight: 100.0

Physical State: Gas liquified by pressure Model Used: EPA's RMP\*Comp(TM)

Release Duration (mins):10Wind Speed (m/sec):1.5Atmospheric Stability Class:FTopography:Rural

**Passive Mitigation Considered** 

Dikes: Yes

Enclosures: Berms: Drains: Sumps: Other Type:

## **Section 3. Toxics: Alternative Release**

Toxic Alter ID: 1000037666

Percent Weight: 100.0

Physical State: Gas liquified by pressure Model Used: EPA's RMP\*Comp(TM)

Wind Speed (m/sec): 3.0
Atmospheric Stability Class: D
Topography: Rural

**Passive Mitigation Considered** 

Dikes: Yes Enclosures:

Berms:
Drains:
Sumps:
Other Type:

Active Mitigation Considered

Sprinkler System:
Deluge System:
Water Curtain:
Neutralization:
Excess Flow Valve:

Flares: Scrubbers:

Emergency Shutdown:

Other Type:

Facility Name: CJ Bio America
EPA Facility Identifier: 1000 0022 2289

# **Section 4. Flammables: Worst Case**

No records found.

Plan Sequence Number: 1000035418

# **Section 5. Flammables: Alternative Release**

No records found.

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

# **Section 6. Accident History**

No records found.

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

## **Section 7. Program Level 3**

## Description

No description available.

## Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID: 1000045681

Chemical Name: Ammonia (anhydrous)

Flammable/Toxic: Toxic CAS Number: 7664-41-7

Prevention Program Level 3 ID: 1000037658 NAICS Code: 311119

### Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):

10-Jul-2013

#### Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):

13-Dec-2012

### The Technique Used

What If:

Checklist: Yes

What If/Checklist:

HAZOP: Yes

Failure Mode and Effects Analysis:

Fault Tree Analysis: Other Technique Used:

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

01-Oct-2013

Yes

### Major Hazards Identified

Toxic Release:

Fire: Explosion:

Runaway Reaction: Polymerization:

Overpressurization: Yes Corrosion: Yes Overfilling: Yes

Contamination:

**Equipment Failure:** Yes

Loss of Cooling, Heating, Electricity, Instrument Air:

Earthquake:

Floods (Flood Plain):

Facility Name: CJ Bio America EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418 Tornado: Yes Hurricanes: Other Major Hazard Identified: **Process Controls in Use** Vents: Yes Relief Valves: Yes Check Valves: Yes Scrubbers: Yes Flares: Manual Shutoffs: Yes Automatic Shutoffs: Yes Interlocks: Yes Alarms and Procedures: Yes Keyed Bypass: Emergency Air Supply: **Emergency Power:** Backup Pump: Grounding Equipment: Inhibitor Addition: Rupture Disks: **Excess Flow Device:** Yes Quench System: Purge System: None: Other Process Control in Use: Mitigation Systems in Use Sprinkler System: Dikes: Yes Fire Walls: Blast Walls: Deluge System: Water Curtain: Enclosure: Neutralization: None: Other Mitigation System in Use:

Monitoring/Detection Systems in Use

Process Area Detectors:

Yes

Perimeter Monitors: None:

Other Monitoring/Detection System in Use:

Changes Since Last PHA Update

Reduction in Chemical Inventory:

Increase in Chemical Inventory:

Change Process Parameters:

Installation of Process Controls:

Installation of Process Detection Systems:

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None: Yes

Other Changes Since Last PHA or PHA Update:

#### **Review of Operating Procedures**

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 12-Jun-2013

#### **Training**

Training Revision Date (The date of the most recent 13-Jul-2013 review or revision of training programs):

#### The Type of Training Provided

Classroom: Yes
On the Job: Yes
Other Training:

#### The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes

Observation:

Other Type of Competency Testing Used:

#### Maintenance

Maintenance Procedures Revision Date (The date of 13-Jul-2013 the most recent review or revision of maintenance procedures):

Equipment Inspection Date (The date of the most recent equipment inspection or test):

26-Apr-2013

Equipment Tested (Equipment most recently inspected or tested):

Ammonia Tank #3

## Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):

#### **Pre-Startup Review**

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

Pre-Startup Review Date (The date of the most recent pre-startup review):

#### **Compliance Audits**

Compliance Audit Date (The date of the most recent compliance audit):

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):

#### Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

#### **Employee Participation Plans**

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):

12-Jun-2013

#### Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most 06-May-2013 recent review or revision of hot work permit procedures):

### **Contractor Safety Procedures**

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):

06-May-2013

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

### **Confidential Business Information**

CBI Claimed:

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

# **Section 8. Program Level 2**

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

## **Section 9. Emergency Response**

### Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Yes

Facility Plan (Does facility have its own written emergency response plan?):

Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Yes

Healthcare (Does facility's ER plan include information on emergency health care?):

Yes

#### **Emergency Response Review**

Review Date (Date of most recent review or update 10-Jul-2013 of facility's ER plan):

#### **Emergency Response Training**

Training Date (Date of most recent review or update 30-Aug-2013 of facility's employees):

#### Local Agency

Agency Name (Name of local agency with which the Region V HazMat facility ER plan or response activities are coordinated):

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):

(515) 955-6748

## Subject to

OSHA Regulations at 29 CFR 1910.38: Yes
OSHA Regulations at 29 CFR 1910.120: Yes
Clean Water Regulations at 40 CFR 112: Yes
RCRA Regulations at CFR 264, 265, and 279.52: Yes
OPA 90 Regulations at 40 CFR 112, 33 CFR 154,

49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws:

Yes

Other (Specify):

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

## **Executive Summary**

The CJ Bio America Facility is currently under construction in Fort Dodge, Iowa. The facility is located in Webster County. The anticipated start up for the facility is October 1, 2013. Since this RMP is being submitted well in advance of facility start up, there are some elements of the risk management program which are still under development. It is the intent of the facility to submit an updated RMP upon complete implementation of the Risk Management Program in advance of facility start up. The discussion below addresses the current status of each element of the risk management program

#### **5 YEAR RELEASE HISTORY**

As stated above, this facility is under construction and has yet to receive any materials therefore there is no release history.

#### **EMPLOYEE PARTICIPATION**

The facility has drafted an employee participation program and this program will be reviewed prior to facility start up.

#### PROCESS SAFETY INFORMATION

Process safety information is being compiled as the facility construction progresses. Since the facility construction is still underway, this material is still subject to change based on process design changes and the implementation of recommendations from the PHA. It is the facilities intent to maintain all PSI in a central location and all safety information will be assembled and reviewed prior to facility start up.

#### PROCESS HAZARD ASSESSMENT

The facility conducted a Process Hazard Assessment on December 13,2012. The PHA utilized a combination of the HAZOP methodology and checklists. The HAZOP focused on hazards related to the process, while the checklists focused on environmental factors, human factors and facility siting. The facility has been addressing recommendations and all recommendations from the PAH will be addressed prior to the facility start up in October.

#### STANDARD OPERATING PROCEDURES

Standard Operating Procedures are still under development, as the facility is still under construction. As SOPs are developed, they are being reviewed for completeness and to ensure that the SOPs contain all required elements. All SOPs will be developed and trained upon prior to the facility commencing operation. SOPs will be certified on an annual basis once the facility begins operation. Operators will be involved with the annual certification.

#### **TRAINING**

Key facility employees have been hired and have been undergoing extensive operations training. This training has involved prolonged visits to existing CJ facilities that are currently in operation in other countries. The training involves a combination of hands on training and classroom training. All training activities are being documented. A training program for employees hired after operation commences is currently under development.

#### MAINTENANCE

The facility will be utilizing the computerized maintenance management module in SAP to manage its mechanical integrity program. That system, is still in development. The system will be utilized to generate work orders for preventative maintenance activities based on manufacturer's recommendations. The frequency of the work orders will follow manufacturer's recommendations and all maintenance activities will be performed according to the procedures specified by the manufacturer. In addition any non-routing maintenance will be tracked in the SAP system so that a complete maintenance history can be ound for each piece of equipment. Since the maintenance program is still being developed at this time, no date has been provided for the review of maintenance procedures or maintenance activities.

#### PRE-STARTUP SAFETY REVIEW

Since this is a new facility, there will be extensive commissioning and testing of equipment prior to the introduction of hazardous materials. This testing includes the verification that the equipment received meets is indeed the specified equipment and that all equipment is installed in accordance with design specifications. In addition to the engineering testing, there will be an additional PSSR conducted prior to the facility start up to verify that all elements of the risk management program are in place prior to start up and that all training has been completed. Since the PSSR is still underway, no date has been provided in this submission.

#### **AUDITS**

EPA Facility Identifier: 1000 0022 2289 Plan Sequence Number: 1000035418

A written audit program has been developed for the facility in which compliance audits will be conducted at least every three years. Since this is a new facility there have been no compliance audits conducted to date.

#### INCIDENT INVESTIGATION

An incident investigation procedure has been developed and all employees will be trained in the procedure prior to commencing operations. Since no hazardous material has been received on site, there have been no incidents which resulted in or could have resulted in catastrophic release to investigate; therefore there is no date provided for the most recent investigation.

#### **HOT WORK**

The facility ahs develop a detailed hot work program. Employees will be trained on the hit work program, prior to commencement of operation.

#### **CONTRACTOR SAFETY**

The facility has developed a contractor safety program that will be implemented upon commencement of operation. During construction the Engineering contractor that is overseeing the construction of the facility has been managing all contractors on site.